

DOCUMENT OF MINIMUM CONDITIONS AND REQUIREMENTS FOR PILOTING THE UYUNI, COIPASA AND PASTOS GRANDES SALT FLATS OF THE DIRECT LITHIUM EXTRACTION TECHNOLOGY (DLT)

BACKGROUND

The Plurinational State of Bolivia, through articles 348, 349, 351 and 359 of the Political Constitution of the State, regulates the adequate treatment of natural mineral resources. The strategy developed by Yacimientos de Litio Bolivianos - YLB, is reflected in the competences assigned by Law N°928, which determine that YLB develops the basic chemical processes of the evaporite resources for the exploration, research, development, production, industrialization and commercialization of commercial salts, derived and intermediate salts and other products of the evaporite chain, all coming from Bolivian salt flats and salt lakes.

According to paragraph III of the sole article of Law N°928: Yacimientos de litio Bolivianos - YLB, will develop the basic chemical processes of its evaporite resources with one hundred percent (100%) state participation for the production and commercialization of: Lithium Chloride, Lithium Sulfate, Lithium Hydroxide and Lithium Carbonate, Potassium Chloride, Potassium Nitrate, Potassium Sulfate, derived and intermediate salts and other products of the evaporite chain. Subsequent processes of semi-industrialization, industrialization and processing of residues may be carried out through association contracts with private, national or foreign companies, maintaining the majority participation of the State.

The evaluation process of the application of a new technology for lithium processing does not have a regulatory basis to refer to since the determination of such process implies verifying its performance with each brine with which this technology is intended to be used. This call is not related to procurement processes for goods and services, which are common in state entities; what is sought is to explore and test different technologies for the direct extraction of lithium.

2. OBJECTIVES

2.1. GENERAL OBJECTIVE

The objective of this document is to establish the basis for evaluating companies with experience and technology capable of adapting to the characteristics of the brines of the Uyuni, Coipasa and Pastos Grandes salt flats through the application of new technologies focused on Direct Lithium Extraction (DLE) and to propose alternatives for processing other elements of commercial value contained in the brines of these salt flats.

2.2. SPECIFIC OBJECTIVES

- To test and evaluate the EDL technology at a scale that allows:
- Generate lithium-rich feedstock for the production of lithium compounds.
- Evaluate performance indicators of the technology such as: recovery, water consumption, reagent consumption, energy consumption, etc.
- Establish technical parameters necessary for process scale-up.
- Propose with upstream and/or downstream processes other raw materials to obtain commercially valuable products.

3. SCOPE

Evaluation of the EDL technology with brines from the Uyuni, Coipasa and Pastos Grandes salt flats through the implementation of pilot tests, including the identification of upstream and/or downstream processes to take advantage of the elements with commercial value contained in the brines of these salt flats.

This evaluation will not lead to the selection of a strategic partner, but will identify those participants with the potential to apply their technology in the different brines to be tested.

The results of the evaluation will not create a commitment from any of the parties for subsequent stages.

4. CONDITIONS

4.1. TECHNOLOGY

The technical considerations for the proposed technology shall be as follows:

- Selective separation of lithium ion, with minimum recovery of 80%.
- Optimized water use (water quality, recovery and recirculation).
- Optimized use of energy.
- Optimized use of chemical reagents.
- Minimal waste generation.
- Minimal environmental impact.
- Minimal use of chemicals that pose a risk to human health and safety.

4.2. FINANCING

The preparation and presentation of the proposal, transportation of personnel and equipment, execution of pilot tests and any other cost resulting from the applicant's participation, whatever the result, will be assumed exclusively by each participant under its full coverage and responsibility.

4.3. CONFIDENTIALITY

Due to the strategic nature of the evaporite resource industrialization projects, the details, terms and other aspects of the proposals, as well as all information, are confidential and will only be treated by authorized personnel of YLB and the participating company, and may not be published or disclosed to third parties without the consent of the applicant. To ensure compliance with these terms, a memorandum of understanding will be signed protecting this confidentiality. This document shall be valid indefinitely.

4.4. EXECUTION OF THE TESTS

The tests will be carried out at YLB's facilities in the Salar de Uyuni. Qualified technical personnel designated by YLB will participate in the tests in order to be actively involved in the process. Power and water for the execution of the tests will be provided by YLB. The development of the pilot tests may be carried out outside the country depending on the proposal of each interested party, but subject to the required evaluations by YLB personnel.

4.5. INTELLECTUAL PROPERTY

Within the framework of the terms agreed in the subscription of the MOU, the publications or patent registration of the results of the tests will be shared property between YLB and the participating company.

5. PARTICIPANTS

Participating companies must comply with the following requirements:

5.1. LEGAL SCOPE

To be legally established within the regulatory framework dictated by the laws of their country of origin and for such purpose they must submit the corresponding supporting documentation.

In the case of having representation in our country, they must be legally constituted in accordance with Bolivian legislation, also submitting the pertinent documentation.

5.2. EXPERIENCE

Interested companies must have at least eight years of general experience in the lithium industry (extraction, processing, cathodes and/or lithium ion batteries), demonstrating it through the corresponding documentation.

Likewise, they must have at least three years of specific experience in the field of direct lithium extraction, which must be supported by the presentation of publications of scientific articles, patents and other similar documents, as well as pilot tests in other countries or projects executed and/or in progress.

6. ACTIVITIES PRIOR TO THE PRESENTATION OF THE PROPOSALS

6.1. The participating companies may visit the different salt flats and carry out a previous inspection of the facilities where the pilot tests will be carried out, in case they are carried out in national territory.

6.2. WRITTEN INQUIRIES

Any potential participant may make written inquiries addressed to the Maximum Executive Authority through a single window and/or via institutional e-mail to the

address convocatoria@ylb.gob.bo. Inquiries may be made up to 5 working days prior to the presentation of the proposals.

7. LANGUAGE

The proposals, their related documents and all correspondence exchanged between YLB and the participating companies, as well as the final results, must be submitted in Spanish. In the event that supporting documents are submitted in another language, a certified translation into Spanish must be attached to the original language document. For on-site testing, the company must have a translator available in case the technical personnel cannot express themselves in Spanish.

8. RESPONSIBILITY FOR PERFORMANCE

8.1. SAFETY MEASURES TO PREVENT ACCIDENTS AT WORK

The participating company must make provisions, provide safety devices and elements, and take any additional action necessary to protect its personnel against accidents.

8.2. COMPLIANCE WITH INTERNAL YLB REGULATIONS

It will be essential to comply with the Industrial Safety and Environmental Regulations implemented by YLB that govern the entire project sector. These regulations are mandatory and must be strictly complied with if the tests are carried out at YLB's facilities. Otherwise, the safety and environmental measures of the test site must also be complied with.

8.3. RESPONSIBILITY IN RELATION TO PUBLIC AND PRIVATE PROPERTY

The participant will be responsible for the preservation of all public and private property existing along and adjacent to the development of the pilot tests that may be damaged by the execution of its work and therefore will have to take the necessary precautions to avoid damage to buildings, power transmission lines, roads and other services that may be damaged by the execution of its work.

Any utility facilities or private property located outside the work area that are damaged by the participant's operations shall be repaired or replaced immediately at the sole expense of the participant.

The Participant shall hold YLB harmless from any claim, action or suit brought for damages to third parties as a result of the Participant's work.

9. PROPOSAL DOCUMENTS

The proposal and the forms requested in this document must be signed by the representative of the participating company.

The documents to be submitted by the interested companies or associations are:

- Proposal. The minimum content of the proposal must be:
- Background of the company.
- Description of the technology.
- Development and experiences of the proposed technology.
- Personnel that will perform the on-site tests.
- Test execution schedule.
- Legal and administrative documentation of the participating company:
- Identity document, ID card or passport of the person or legal representative who will sign the proposal and the forms.
- Power of attorney of the legal representative or equivalent document in the country of origin, with authority to submit proposals.
- Tax identification number or equivalent document in the country of origin.
- Commercial registration number or equivalent document (if applicable) proving the legal establishment of the company in the country of origin.
- If the original documents were issued in languages other than Spanish, they must be translated into Spanish.
- Participant Identification Form (Form A).
- General Company Experience Form (Form B).
- Company's Specific EDL Experience Form (Form C).

10. SUBMISSION OF PROPOSALS

Proposals may be submitted by physical document or via courier to YLB's Single Window for their registration in the presentation record (Address: Mariscal Santa Cruz Avenue, Hansa Building, 19th Floor - La Paz, Bolivia), or by e-mail to convocatoria@ylb.gob.bo. All proposals received by the means communicated will be registered in the minutes, being the deadline for presentation on Monday, May 31, 2021, at 3:00 p.m. (Bolivian time).